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Orthopaedic Surgeon
Knee Specialist

Total Knee Replacement

Information for Patients

Introduction & Pre-Surgery Care

Total knee replacement (TKR) is major surgery and a decision to proceed with the operation is made only after a thorough consideration of the symptoms you are suffering and the likely risks and benefits of surgery.

Prior to booking surgery, Dr Parker will question you on your general health. If there is a history of problems with your heart, lungs, blood pressure, circulation or other areas, you may be referred to an appropriate specialist for an opinion on whether you are fit for surgery and whether any special precautions are required. If you are considered relatively unfit or the specialist considers the risk of surgery to be great, it may still be possible to proceed with surgery but only if you and your relatives are aware of, and are prepared to accept the risks.

If you take Warfarin you will need to stop this 5 days prior to surgery. This will need to be discussed with Dr Parker and your local doctor or specialist who prescribed the warfarin. You should stop any aspirin and anti-inflammatory medications 7 days before surgery. These drugs interfere with blood clotting. Hormone replacement therapy should be stopped one month prior to surgery. You should continue with all your other medication and bring them to hospital so that the staff can arrange ongoing prescription of the appropriate dose. If you have any concerns about medications you are taking, you should discuss this with Dr Parker.

You must also bring your x-rays. Also, ensure that you have no cuts or scratches on your skin, as this is an infection risk and will usually result in the surgery being deferred.

Hospital

You are usually admitted to hospital the day before surgery or occasionally on the same day. You will be seen by Dr Parker and the anaesthetist prior to the surgery. Nursing and physiotherapy staff will also help with your orientation. The Anaesthetist will discuss your prior anaesthetic history and any special risks. Surgery is carried out through an incision over the front of the knee and takes approximately one to two hours depending on what is required. The worn out joint surfaces are removed and replaced with artificial surfaces. The prosthesis is usually fixed to your bone with bone cement, or occasionally a press fit where the bone grows into a porous surface on the prosthesis. A low pressure suction drain is utilised to remove shed blood from the joint after the surgery. The shed blood is stored, and can be filtered and retransfused if suitable.

Most patients recovering from total knee replacement find the knee to be quite uncomfortable, especially in the first two weeks. A variety of measures are used to control pain including local anaesthetic injected at the surgery, patient controlled analgesia (where the patient pushes a button to deliver a small intravenous dose of medication), nerve block injections, ice and oral medication. It can take up to three to four months before the patient agrees the replaced knee feels better than before surgery but this is variable.

On the day after surgery, the drain is removed, and the dressing is reduced to a small waterproof cover. Blood tests and an X-ray of the knee replacement are done, and the rehabilitation is begun. This is supervised by the physiotherapist. A series of exercises begins, and the goals of these are to improve the movement of the knee and get you walking again. The exercises will concentrate on making sure your knee goes fully straight and achieves good bending. Although the knee is quite painful after the surgery, it is important to work on these exercises otherwise stiffness can result. Good pain relief and regular exercises starting the day after the surgery will usually lead to a good range of movement and hence a good result.

Discharge from hospital occurs when the knee is bending adequately and you are safely mobile, either on crutches or a frame. The length of hospital stay is usually about a week.

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Rehabilitation

Some patients require a more prolonged stay in hospital for intensive physiotherapy. This is usually arranged, if necessary, in a rehabilitation hospital. Most patients will require some form of walking aid: crutches, a frame, or a stick for about three months. This depends on your confidence, although a stick outside the home is a good idea for the first three months as it alerts others that you are possibly still slightly unsteady. Injections of blood thinner to prevent clots continue daily until discharge from hospital but the white (TED) stockings continue until the six week post-op check. At this appointment further x-rays are taken.

Most patients can safely drive at 6 weeks and gradually increase walking distances at this time. Bowls and golf may be resumed at 3 to 6 months. Running is not recommended at any time after the operation as wear of the prosthesis will occur more rapidly.

Results and Complications

Overall 90% of patients are happy with their knee replacement. In approximately 90 to 95% of people, the majority of pain is relieved, deformity (crookedness) of the leg is corrected, and mobility is improved. Range of motion averages 110 to 115 degrees but patients with significant stiffness prior to surgery tend to achieve less overall movement than others.

Should the knee prosthesis wear out, revision knee replacement is possible but is more complex surgery than the first replacement, with the results usually not being as satisfactory as first time surgery and the risks are greater.

The prosthesis is an artificial joint with a bearing surface which wears out over time. Most commonly the implant will last the duration of the patient's life. Failure occurs if the plastic component wears out or the implant works loose from the bone.

Some of the important complications include infection, blood clots, inadvertent injury to blood vessels or nerves, stiffness, and difficulties with wound healing. Deep infection may require removal of the implant, prolonged antibiotics, and later surgery to insert a new implant. Major clots are uncommon but can be fatal. All surgery and anaesthesia carries risks and is not entered into lightly. Dr Parker and his team work very hard to prevent complications and it is important the patient co-operate with all medical and hospital staff to achieve an optimum result. If you have any questions concerning complications, please feel free to speak with Dr Parker. If you develop unexplained calf pain, chest pain, fever, wound discharge, or any other concerns after surgery, please notify Dr Parker or the hospital staff immediately.

Precautions after Surgery

You should not do any impact or jarring activities, including any running or jumping. Please feel free to discuss any activities or aspirations with Dr Parker. Always inform your dentist that you have a knee replacement so that antibiotics to prevent infection may be given when you have dental procedures. This is also the case for any open surgery. Ensure prompt antibiotic treatment of any skin or urinary infection.

Costs

Dr Parker's charges and any associated gap not covered by Medicare and your health fund will be discussed with you when your surgery is arranged. Please feel free to discuss any aspect of this which is unclear to you, either with Dr Parker or his secretary.

If you have any questions concerning your surgery, its risks, benefits, likely outcome or complications please do not hesitate to contact Dr Parker.